

KITES AND WINDBLOWN TOYS FROM TIKOPIA, A POLYNESIAN OUTLIER IN THE SOLOMON ISLANDS

MICK PENDERGRAST

AUCKLAND INSTITUTE AND MUSEUM

Abstract. Description and directions for the making of children's toys from Tikopia, a Polynesian outlier in the Solomon Islands.

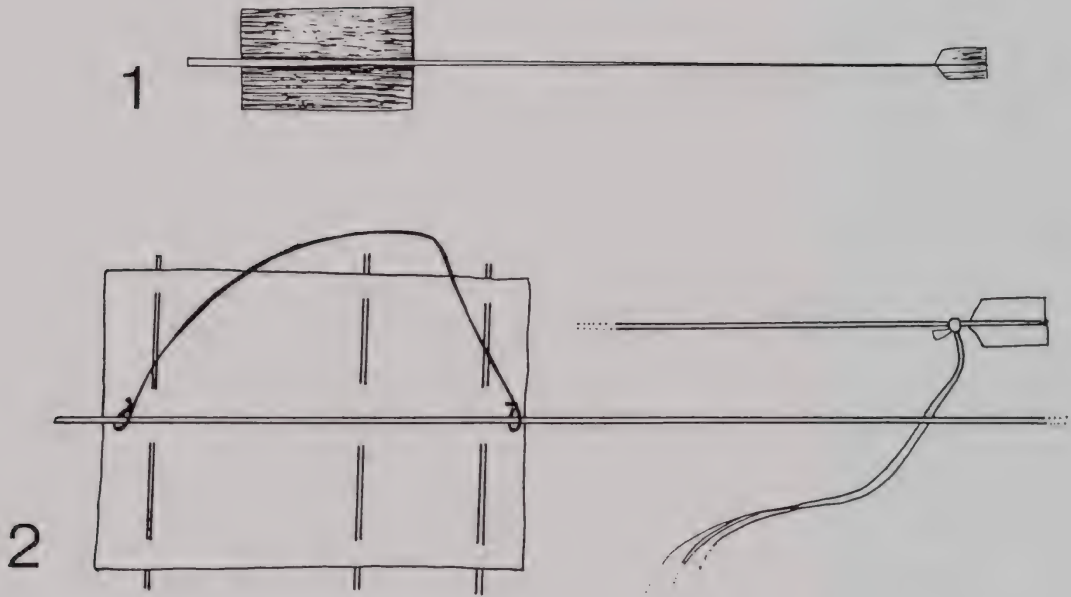
The tiny island of Tikopia is politically part of the Solomon Islands but culturally Polynesian. It lies at 168° 50'E and 12° 10'S to the east of the Santa Cruz group and to the north of the Banks Islands in Vanuatu. From June until August each year, almost continuous tradewinds blow from the east. The weather is cool, the mosquitoes have disappeared and children can enjoy playing with toys that are moved by the wind.

For six years spread over 1973 to 1980 I worked on Tikopia as a volunteer teacher for the New Zealand Volunteer Service Abroad and was able to observe, among many other things, the making and flying of traditional kites and other windblown toys. No games are associated with the toys other than seeing how high a kite will fly or how fast a model canoe will travel.

Manu rau (kites)

Tikopian children make and fly two kinds of kite. Both are known as *manu rau* and are made from leaflets of the sago palm (*te ota*, *Metroxylon* sp.) which provides a very suitable material, being both light and strong.

The smaller and more easily made of the two kinds is constructed from a single dried sago leaflet found on the ground beneath the trees. The midrib (*ngausala*) is left intact, and the leaf surface stripped away except for a rectangular section approximately 20 x 14 cm close to the thicker end. A very small section is also left at the thinner top of the midrib (Fig. 1). Next three lengths of *sina*, the thin brittle sticks obtained from the inside of the butt of a decaying sago leaf midrib, are threaded across the rectangle of remaining leaf area to hold it flat and firm. A string, usually a strip of *karava niu* stripped from the upper surface of the midrib of a coconut leaf, is attached to each end of the rectangle, allowing some slack. Lifting the leaf surface away from the midrib for a short distance creates an opening into which the string can be slipped and so held in place. To this string the flying cord, also frequently of *karava niu*, will be attached. A tail is tied to the narrow end of the sago midrib to act as a balance. It may consist of a strip of bast fibre called *kari vakai*, or a length of a creeping grass called *mauku* (*Thurea involuta*) which grows on the sand above high water mark. The small section at the tip of the midrib prevents the tail from falling off (Fig. 2).



Figs. 1, 2. The smaller type of *manu rau* or Tikopian kite. 1. The sago leaflet with sections of leaf surface removed to form the basic shape of the kite. 2. Detail, showing the thin sticks sown through to hold the leaflet flat, and the method of attaching the flying cord and 'tail'.

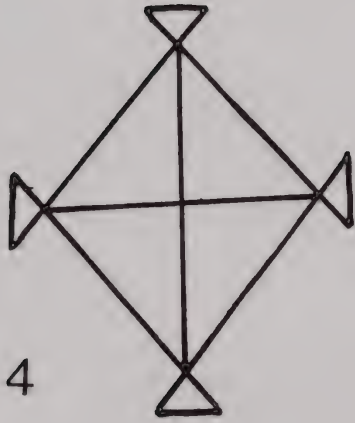
The other type of *manu rau* is larger and rather more complex. It is believed to have been introduced by men from Rotuma Island which lies to the east of Tikopia. The diamond-shaped tattoo motif (Fig. 4) frequently seen on the front of the shoulders of mature Tikopian men (Fig. 3) is said to represent this kite. The pattern is called *manu fakarotuma* (Rotuma style kite). A number of dried sago leaflets are gathered from beneath the sago trees. The midribs taken from two of these and measuring c. 96 cm and 68 cm are tied together at right angles to form a cross which is called *te fakamakeke o te manu* (Fig. 5). Four leaflets are now selected and folded along their centres and cut to the shape shown in Fig. 6 to fit around the edges of the kite. These are *te kaokao o te manu* (the ribs of the kite). The midribs, being left longer, protrude about 6 cm at each corner. They are tied into place on the cross and the corners pinned down (*e ti te kaokao o te manu*) by skewering them together with a short length of *sina* where they overlap (Figs. 7, 9, 10). The centre (*rotonu manu*) is now filled in with 9 cm wide strips of leaf with the midribs removed, cut into the appropriate shapes as shown in Fig. 8. These strips are tucked into place inside the double layers already forming the outline and making a neat finish (Fig. 9).

All the strips of leaflet are pinned together (*e ti te rotonu o te manu*) as required, with short lengths of *sina*. To do this a length of *sina* is sewn through the layers of leaflet where necessary and then the unused section of *sina* is snapped off to be used again for the next pinning (Figs. 10, 11). When the whole surface of the kite has been filled in and pinned into place, two more lengths of midrib are secured as a cross on the front surface. There is now a sago midrib cross on each surface. Small holes are made through the centre to allow the two crosses to be tied together to make

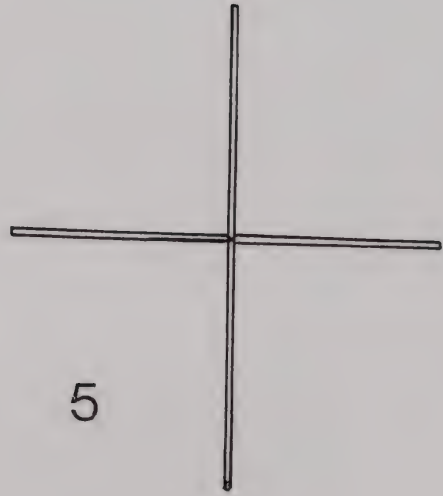
it more secure (Fig. 12). A length of *karava* (from the upper surface of a coconut leaf midrib) is tied to the top and bottom corners of the kite leaving some slack and the flying string, usually made from some strips of *karava* knotted together, is secured to this. At the lower corner a long length of *mauku* is attached. If additional weight is required, extra lengths are twisted in to make it longer. Sometimes a complete dried banana leaf is used instead.



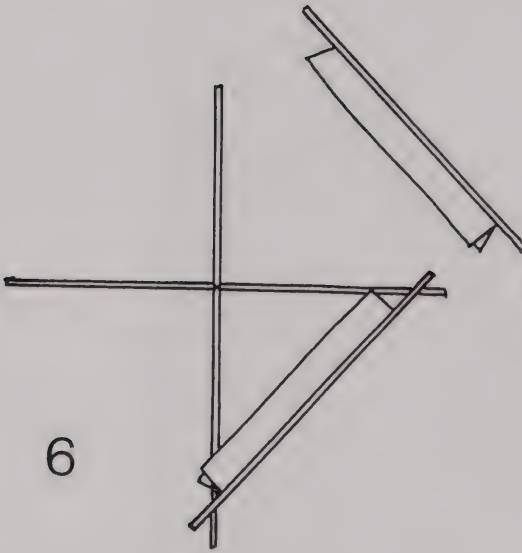
Fig. 3. Pu Tevaea, an elder of the Tafua Clan wears the full traditional Tikopian male tattoo. In front of each shoulder can be seen the motif representing the *manu fakarotuma* (the Rotuma style kite).



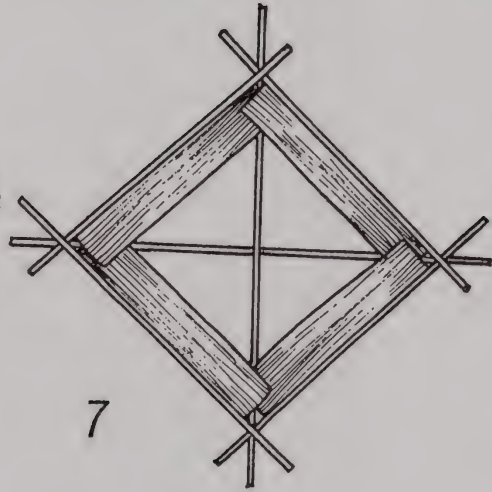
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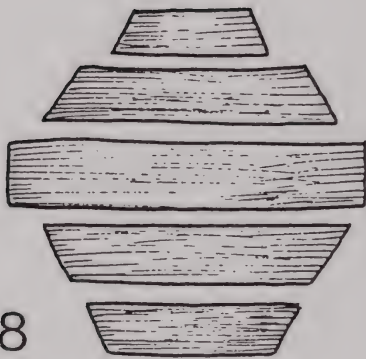
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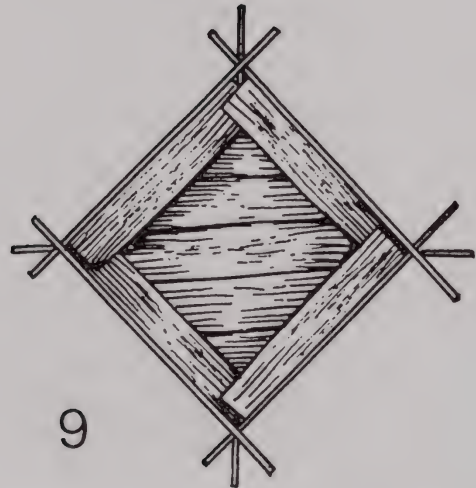
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Figs. 4-9. 4. The tattoo pattern, *manu fakarotuma*, which represents the kite from Rotuma. 5-9. Stages in the manufacture of the larger kite or *manu rau*.

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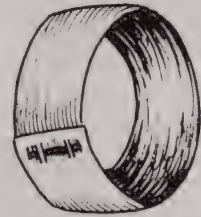
Figs. 10-12. The larger type of *manu rau* (kite) made from sago leaflets and leaflet midribs.
10,11. Fred Maseu sews the sago leaf strips in place to close the centre of the kite. 12.
The completed kite.

Manu fakarerere (leaf hoop)

Manu fakarerere is a simple leaf hoop which causes great merriment among the smaller children, as driven by the wind, it races along the hard packed sand at low tide. It is normally made from a strip taken from a green leaflet of a sago palm, although coconut leaflet may be used. For a typical example a section of leaflet 19 cm long and 2 cm wide is torn or cut from the leaflet (Fig. 13), rolled into a circle and pinned in position (*e ti te manu fakarerere*) with a short length of *sina*. With 1 cm or so of overlap at the join, the resulting hoop is 5 cm in diameter (Fig. 14). The name *manu fakarerere* was used among the school children at Safoa but Pa Rangifuri, heir to the chiefly title of the Tafua clan, gave the alternative name of *manu fakavikavika*. Similar toys are widespread in Oceania and a Cook Islands version is given for Aitutaki Island by Te Rangihiroa (1927:319).



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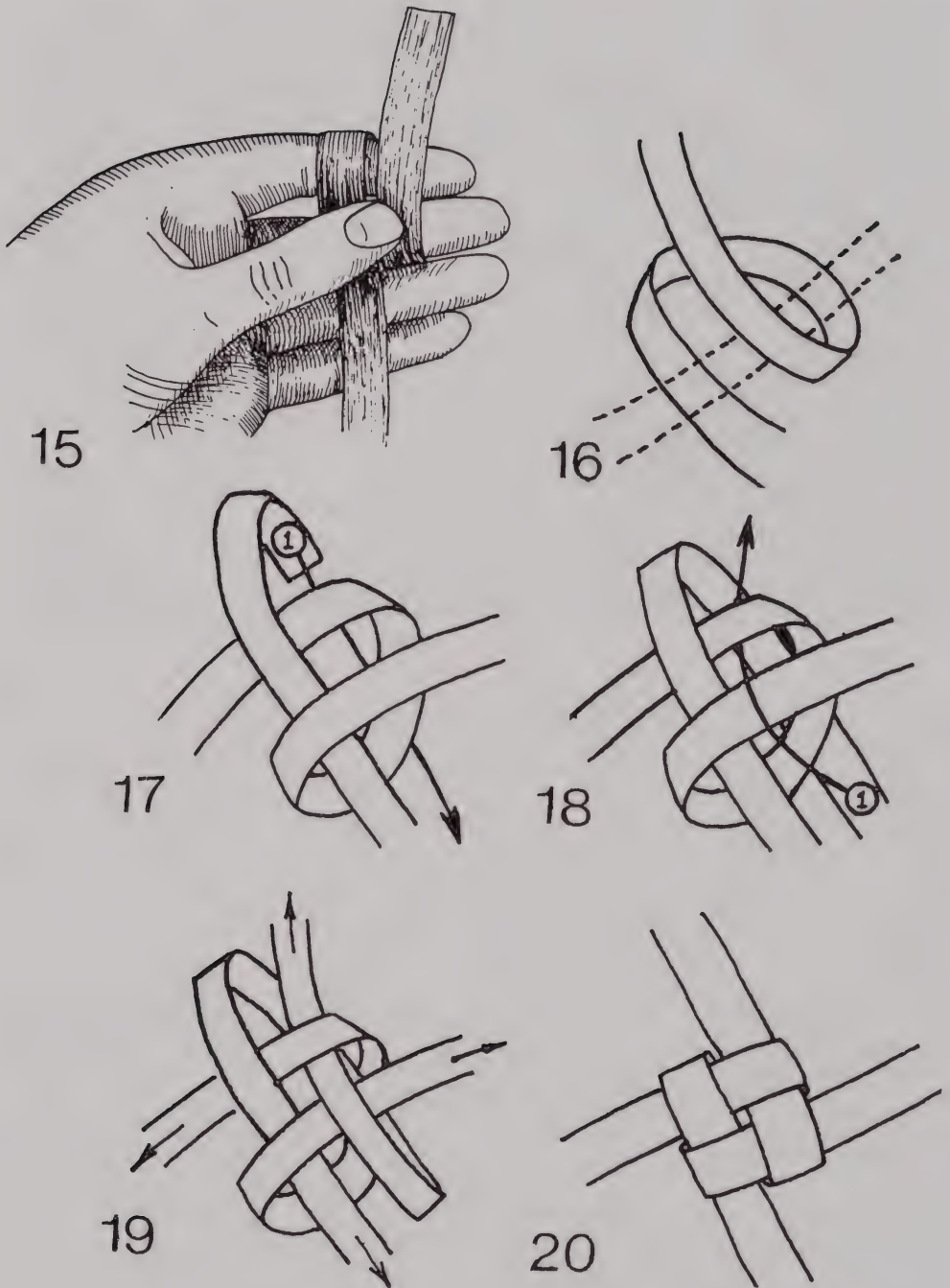


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Figs. 13, 14. 13. A section removed from a sago leaflet to make the rolling toy called *manu fakarerere*. 14. *Manu fakarerere*, the toy which rolls in the wind.

Pakalili (windmill)

A coconut leaflet windmill which is made throughout the Pacific, is known as *pakalili* on Tikopia. It is constructed as shown in the figures and then threaded on to a short length of stick or sometimes on to the narrow end of the full length of a midrib taken from a coconut leaflet. The toy is made from two strips of leaf about 2 cm wide and 40-50 cm long. One of the strips is twisted around the first two fingers of the left hand as shown in Fig. 15 to form the hoop shown in Fig. 16. The second strip is placed through the loop as indicated in Fig. 16 and shown in Fig. 17. Strip 1 in Fig. 17 is taken behind the work as indicated by the arrow and brought to the position shown in Fig. 18. The same strip 1 is then carried over a strip and through the original hoop as indicated by the arrow in Fig. 18 to the position shown in Fig. 19. The knot is tightened by pulling on the ends of all the strips as indicated by the arrows. The knot is now complete and should look like Fig. 20. The ends of the windmill are trimmed so that they are of equal length. A hole is pierced through the centre so that a small stick can be put through. The windmill spins on the stick when held into the wind (Fig. 21), or it may be threaded on to the narrow end of a coconut leaflet midrib which is knotted at the end. It is held away from the wind, which holds the midrib firmly in a horizontal position, and the *pakalili* spins against the knot.



Figs. 15-20. Stages involved in the manufacture of the toy windmill or *pakalili*.

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Fig. 21. The usual method of holding the *pakalili* into the wind.

Ngaringari (rat)

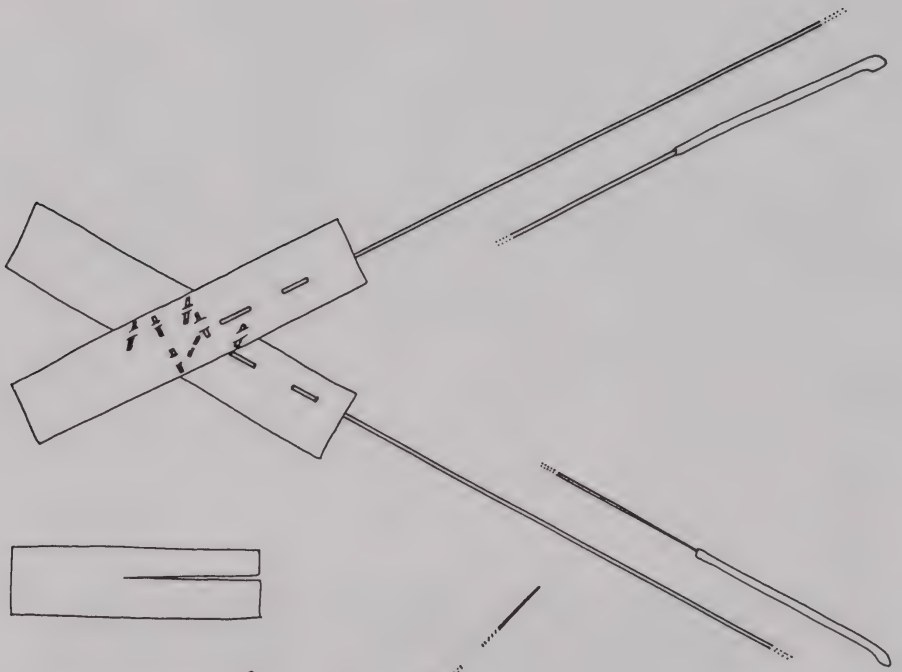
Amusing toys called *ngaringari* (rat) are made from sago leaflet and the midribs of two coconut leaflets. They are placed on the ground, usually on the hard sand when the tide is out and there is a very strong wind blowing. The wind lifts the body of the 'rat' off the ground, while the 'legs' trail behind. Sometimes the *ngaringari* dash across the sand exposed by the low tide and, on reaching the water, leap into the air. (The Tikopians are familiar with the word *kiore*, the more common Polynesian term for rat, but seldom use it.)

The three variations illustrated all work on the same principal; this consists of a construction with a large flat area, slightly concave beneath, which rides on the wind, dragging behind it two long projections to hold the balance. The length and weight of these 'legs' is varied to suit the amount of wind.

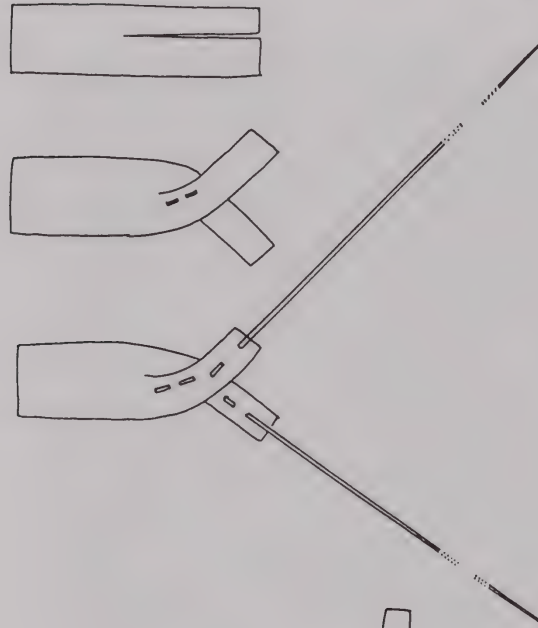
The *ngaringari* illustrated in Fig. 22 is made from two rectangular sections, each 30 x 7 cm of sago leaf which are crossed and pinned together with short lengths of *sina*. A length of coconut leaflet midrib is threaded into each rectangle as shown. On this example, because of especially strong wind, a weight was added to the midribs by the addition at the end of each, of a 12 cm length of petiole from a small pawpaw leaf. The over-all length of the toy was 67 cm.

The second *ngaringari* is made from a single 16 x 17 cm rectangle of sago leaf which is split half way along its length. One of the resulting sections is folded across the other and pinned in place with a length of *sina*. A length of coconut leaflet midrib is threaded longitudinally into each section (as in Fig. 23) and the toy is complete.

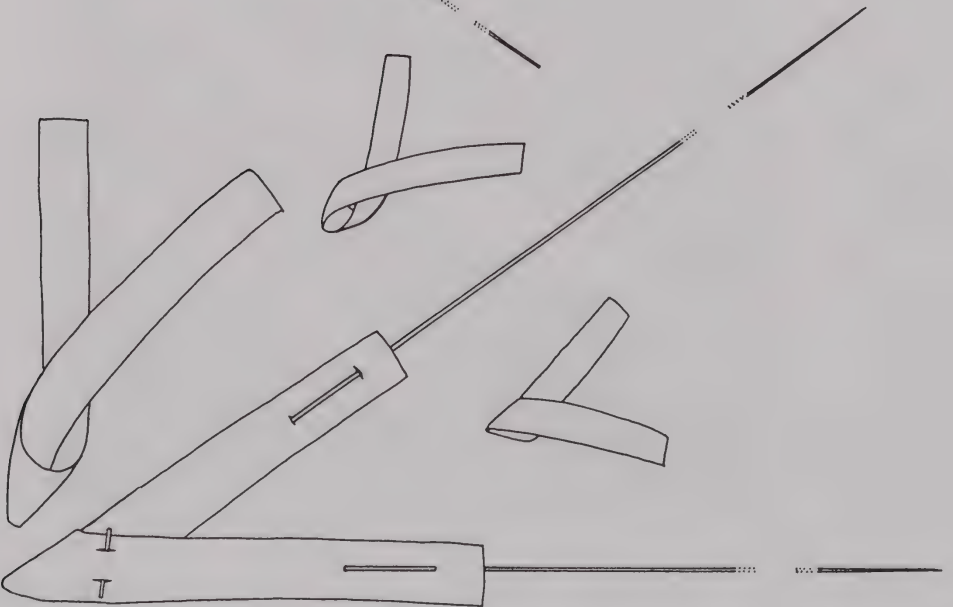
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Figs. 22-24. Three types of a windblown toy called *ngaringari* or rat. 23. Stages of manufacture of one type.

The third *ngaringari* is also made from a single rectangle of sago leaf which is rolled and twisted into the shape shown in Fig. 24 and then pinned into place. Again the lengths of midrib are attached as in the other examples. This type is also sometimes used without the midribs.



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Fig. 25. A model sailing canoe (*vaka fai manu*) made by Leslie Tufakimaru.

Vaka fai manu (model sailing canoes)

When the sea is below high water and its surface calm behind the protection of the reef, boys sometimes sail and race their model canoes. The simplest ones belonging to the youngest boys may consist of half a coconut husk with a leaf threaded on a stick for a sail. As the boys grow older and more time and effort is spent on the toys, they are recognisable as miniature replicas of the full-sized sea-going canoe or *vaka fai manu*. Some boys of twelve years of age show a remarkable knowledge of the construction and subtleties of the form of the hull and outrigger.

The model *vaka fai manu* (Fig. 25) is carved from soft wood, usually that of the *te puka* tree (*Hernandia* sp.). A large bush knife is the only tool available and smoothing off may be done with a pebble of dead coral, a leaf from a rough-leaved "sand paper tree", a piece of broken glass, or a combination of any of these.

Pith from the sago palm is sometimes used to make toy ships. These are based on the government vessels which call at the island, or on fishing boats seen in the vicinity, but the model sailing canoes always follow the form of the indigenous craft. Frequently the hull and outrigger proportions are modified, becoming longer and narrower for streamlining and to allow a larger sail to be carried. No attempt is made to hollow out the hull and a raised section near the bow and stern show the approximate outline of the bow and stern covers (*te puke*), which in the full sized canoe are carved separately and lashed into place.

Pegs of harder wood, commonly *te ora* (*Canthium* sp.), are driven into the hull and outrigger and to these the thwarts (which do not always follow the form of those on the full-sized canoe) are tied. The mast is also of hard wood driven into the hull and sails of varying sizes and often fantastic shapes are attached. For these a sheet of thin plastic is the preferred material. It is said that in earlier times cotton cloth, bark cloth, leaves or *kaka* (the sheath from the base of a young coconut leaf) were used but all of these have the disadvantage of becoming heavy when wet.

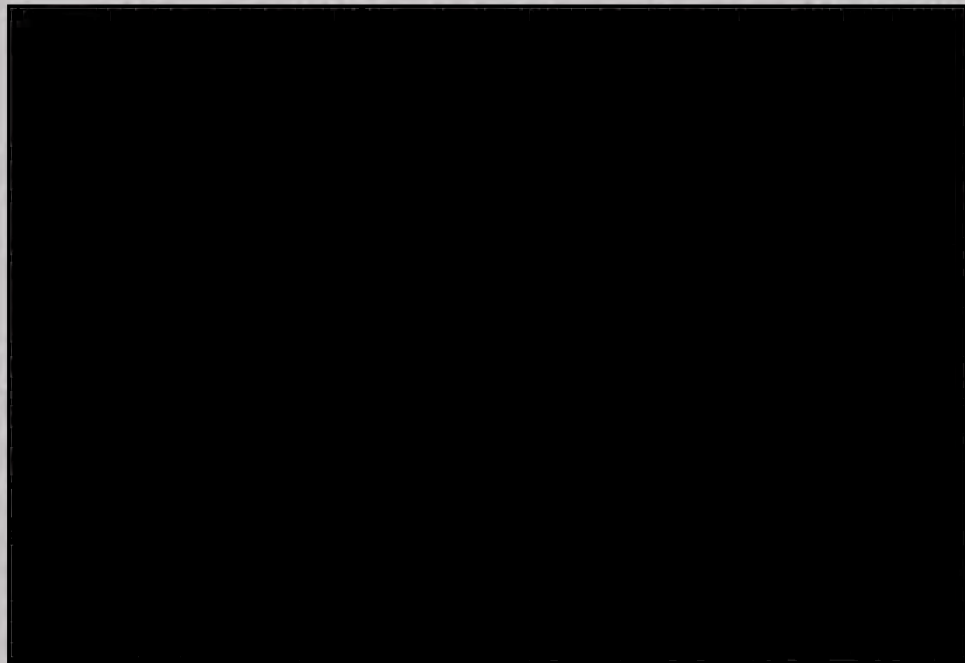
Vaka farakau (leaf canoe)

The *vaka farakau* is a model boat (*vaka*) made from a single leaf of the *farakau* tree (*Ochrosia* sp.). The leaf is tied into a curve so that the part of it that is above the water acts as a sail (Fig. 26).

Towards the tip end of the leaf a hole is made on each side of the midrib and a strip of *karava niu* (fibre from coconut leaf midrib) threaded through and tied. The tip of the leaf is then pulled back by the cord, the other end of which is wrapped around the petiole three times before being secured to hold the leaf in its curved position. The bend is made so that the upper surface of the leaf will be in contact with the surface of the water (Fig. 27).



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Fig. 26-27. The leaf sailing canoe called *vaka farakau*. 26. The canoe made from a single leaf. 27. Harold Arikimuakisolomonu demonstrates the method of sailing the *vaka farakau*.

The following incantation may be recited to encourage speed when the boats are raced on the still water on the reef shelf at low tide (Fig. 27).

Tao tao marie
Tou kau fe.

Acknowledgements. I would like to acknowledge the assistance of Leslie Tufakimaru, Hosea Fetauta, Harold Arikimuakisolomonu, Roman Muakiteava, Badderly Forau and Fred Maseu, all of whom were pupils at Safoa School; they took the time to gather the materials and teach me to make the toys and demonstrate how they work. Thanks to Pu Tevaea of Tafua clan for permitting his photograph to be taken.

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